



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|-------------|----------------------|---------------------|------------------|
| 10/798,240 | 03/11/2004 | Dale J. Carter | 2635.CIRQ.NP | 3555 |
| 26986 | 7590 | 03/24/2006 | EXAMINER | |
| MORRISS O'BRYANT COMPAGNI, P.C. | | | TRAN, HENRY N | |
| 136 SOUTH MAIN STREET | | | ART UNIT | |
| SUITE 700 | | | PAPER NUMBER | |
| SALT LAKE CITY, UT 84101 | | | 2629 | |

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,240

Applicant(s)

CARTER ET AL.

Examiner

Henry N. Tran

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Amendment received October 17, 2005 has been fully considered; and this Office action is in response thereto. Claims 1-25 remain pending in this application.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “a first sensor” recited in claims 11 and 24 must be shown or the feature canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The listing of references in pages 7 and 13 of the specification is not a proper information disclosure statement.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation: "any other sensing technology that enables detection of contact of a user on the at least one second sensor", which is found indefinite because the term "any" does not specify a tangible limitation. For the purpose of this Office action, the examiner will assume that said above limitation is changed to --capacitance sensing--, which is used in the amended claim 4.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2 and 4, are rejected under 35 U.S.C. 102(e) as being anticipated by Davis (U.S. Patent No. 6,292,674).

7. Regarding claims 1 and 2, Davis, Figs. 1 and 3, teaches a portable electronic appliance, which is a mobile telephone 10, comprising: a portable electronic appliance having a housing 12, a data entry device 26 and a display screen 30; at least one second sensor 304 (a capacitive switch 304 used as a grasp-sensitive switch) disposed on a surface of the housing such that a user will only make physical contact with the at least one second sensor to thereby actuate the at least one second sensor; and wherein the at least one second sensor provides contact data to a sensor circuit 346 (a switch Detector 346) disposed within the within the portable electronic appliance, wherein the contact data in the sensor circuit is utilized by a processor 22 (a Controller 22) within the portable electronic appliance to determine whether or not to activate or deactivate a predetermined function of the portable electronic appliance. See col. 4, lines 13-41; col. 5, lines 12-20; and lines 42-64.

8. Regarding claim 4, Davis further teaches that the at least one second sensor 304 is a pressure sensitive switch (the user grasps and or squeezes the housing – see Fig. 2, col. 5, lines 29-36)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-3, 5-8, 10, 12-21, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (U.S. Patent No. 6,292,674) in view of Casebolt et al (U.S. Patent No. 6,661,410, hereinafter referred to as "Casebolt").

11. Regarding claims 1-3 and 13, Davis teaches generally all the claimed elements and limitations except for: (i) the at least one second sensor is comprised of a capacitance sensitive touchpad; and (ii) the at least one second sensor disposed underneath a surface of the housing such that a user is detected using proximity sensing capabilities of the at least one second sensor, and proximity sensing data is provided to a sensor circuit and is utilized by a processor for activating or deactivating a predetermined function of the portable electronic appliance.

Casebolt, Figs. 6, 13 and 14, teaches a portable electronic appliance, which is a mouse 107 having a housing 185, wherein at least one second sensor 145 (a capacitive sensor 145 used as a capacitance sensitive touchpad) disposed underneath a surface (a top case 109) of the housing 185 such that a user is detected using proximity sensing capabilities of the at least one second sensor, and proximity sensing data is utilized for activating or deactivating a predetermined function, e.g., ON/OFF functions, of the portable electronic appliance. See col. 20, line 52 to col. 22, line 58.

Art Unit: 2674

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the capacitance sensitive touchpad as taught by Casebolt in the Davis device because this would provide an improved portable electronic appliance, which utilizes a low cost, flexible and “easy to apply” capacitive sensor circuit, for providing the enhanced functionality and reliability of the portable electronic appliance. See Casebolt, col. 20, lines 65-66; and col. 22, lines 28-31. By this rationale, claims 1-3 and 13 are rejected.

12. Regarding claims 5-8, 10 and 12, Casebolt further teaches that: (i) the capacitance sensitive touchpad is capable of conforming to arcuate surface; see Fig. 6, col. 26-40; (ii) the capacitance sensitive touchpad is capable of sensing touch or proximity sensing; see col. 22, lines 50-52; (iii) the at least one second sensor is the capacitance sensitive touchpad that is comprises of a plurality of capacitance sensitive touchpads (Casebolt teaches “multiple plate”; see col. 22, lines 40-49; and (iv) the functions that cab be activated or deactivated using the at least one second sensor are turning on, turning off (Casebolt teaches “ON/OFF”; see col. 22, lines 50-52). Claims 5-8, 10 and 12 are dependent upon the base claims 1-3, and are therefore rejected on the same reasons set forth for claims 1-3, and the reasons noted above.

13. Regarding claims 14-21, 23 and 25, which are method claims corresponding the apparatus claims 13, 3, 5-8, 10 and 12, and are therefore rejected on the same basis set forth in claims 1-3, 5-8, 10, 12 and 13 discussed above.

14. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Casebolt (hereinafter referred to as “Davis-Casebolt”) as applied to claims 1-3, 5-8, 10, 12-15, 17, 18 and 25 above, and further in view of Molne (U.S. Patent No. 6,243,080).

Davis-Casebolt teaches generally all except for the at least one second sensor is comprised of at least one general purpose touchpad that can sense position as well as touch or proximity of a touching object to the touchpad. Molne teaches the use of a touch sensitive panel 30 having a top surface 32 which acts as a touchpad 32 that can sense position as well as touch of a touching object to the touch panel; see Figs 1, 2 and 6; col. 3, lines 15-36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the touchpad of Molne in the Davis-Casebolt device because this would provide an enhanced functionality of the device-operator interface. See Molne, col. 4, line 63 to col. 5, line 6. By this rationale, claims 9 and 22 are rejected.

15. Claims 11 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Casebolt (hereinafter referred to as "Davis-Casebolt") as applied to claims 1 and 14 above, and further in view of Reber et al (U.S. Patent No. 6,418,325, hereinafter referred to as "Reber").

Davis-Casebolt teaches generally all except for the portable electronic appliance is further comprised of a first sensor, wherein the first sensor is capable of determining orientation of the portable electronic appliance.

Reber, Figs. 1 and 4, teaches a portable phone 100 that includes orientation sensor (48 and 49) (col. 6, lines 53-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teaching of Reber for having an orientation sensor to be

incorporated into Davis-Casebolt device so as to be able to change the data displayed on the display based on the orientation of the device, and therefore, make the device user friendly.

Response to Arguments

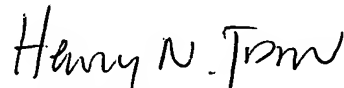
16. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new grounds of rejection discussed above.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry N. Tran whose telephone number is 571-272-7760. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Henry N Tran
Primary Examiner
Art Unit 2674